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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/496,086
Filing Date: February 01, 2000
Appellant(s): CHATTERJEE ET AL.

Charles G Call
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/24/2005 appealing from the Office action mailed

4/26/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,243,713 B1	NELSON et al.	6-2001
6,748,382 B1	MOHAN et al.	6-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-8, and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Nelson et al. (hereinafter "Nelson"), US 6,243,713 B1 filed 8/24/1998.

Regarding independent claim 1, Nelson teaches analyzing a multimedia document to

identify at least one markup tag containing a reference to a given one of resources in fig. 1-2, fig.

4, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 9 line 7. Nelson shows in the col.

5 lines 39-51 that the multimedia document can be an HTML document and HTML documents

generally represent Web pages, thus the scope of Nelson includes multimedia Web page

documents. Nelson also specifically indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the

multimedia document may be a downloaded Web page. Nelson teaches selecting and executing

a media processing program for analyzing the content of the multimedia data supplied by the

given one of the resources to generate metadata describing the content in fig. 2, fig. 4-7, and col.

9 line 9 – col. 14 line 55. The cited text section described how Nelson generates metadata for

each of the types of multimedia content components. Nelson teaches formatting the metadata

into character-based tokens in fig. 6-8 and col. 3 lines 19-59. The tokens for the different

multimedia component types are normalized so that tokens can be combined into a single index

as is shown in fig. 8. Nelson teaches indexing the multimedia document into a unified

multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia

document in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the

document from which it was extracted through use of a unique document ID referencing that

document.

Nelson does not teach combining the Web page and the generated annotation (Nelson

calls it a token) to form an enhanced Web page. As stated earlier, Nelson does teach that all of

the tokens extracted from a particular document are linked to that document through use of a

unique document ID in col. 15 lines 24-36. Therefore, tokens of text, image, video, audio, and

other data are all linked together to represent a single document through use of the unique

document ID. Thus, this is essentially the same in function, but only similar in form to the

claimed limitation. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have modified Nelson to have created the claimed invention. It would

have been obvious and desirable to have modified Nelson to have inserted the token

representations of image, video, audio, and other multimedia components into the text of the

multimedia document so that the text did not have to be processed, thus allowing the extraction

software design to be simpler.

Regarding dependent claim 2, Nelson teaches determining the particular data type of

the multimedia data supplied by the given resource and selecting a processing program for

analyzing multimedia data formatted in accordance with the particular data type in fig. 2, fig. 4,

and col. 3 lines 21-27.

Regarding dependent claim 4, Nelson teaches acquiring additional metadata which

describes the multimedia data supplied by the given one of the resources, and including the

additional metadata in the character-based text annotation in fig. 2, fig. 4-7, and col. 9 line 9 –

col. 14 line 55. Nelson teaches that the position data may be used in creating the tokens, thus

Nelson teaches that the additional metadata may be supplied by a source other than the content of

the multimedia data.

Regarding dependent claim 5, Nelson teaches wherein at least some of the additional

metadata includes information obtained from the one markup tag in fig. 2, fig. 4-7, and col. 9 line

9 – col. 14 line 55. Nelson indicates in col. 9 line 9 – col. 10 line 37 that the tags may be used to

identify a position and a name for the identified multimedia component.

Regarding dependent claim 6, Nelson teaches acquiring additional metadata which

describes the multimedia data supplied by the given one of the resources, and including the

additional metadata in the character-based text annotation in fig. 2, fig. 4-7, and col. 9 line 9 –

col. 14 line 55. Nelson does not specifically teach wherein the given resource is accessed

through the operating system of the computer which provides the given resource and wherein at

least some of the additional metadata includes information obtained from the operating system.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to have modified Nelson to have created the claimed invention. Nelson teaches the

multimedia content components may be referenced from the multimedia document and thus a

valid reference would be a multimedia content component from the operating system. It would

have be obvious and desirable to have obtained a referenced resource from the operating system

and used metadata from the operating system to describe the resource so that multimedia

components could have taken advantage of the local computer's operating system resources.

Regarding dependent claim 7, Nelson teaches acquiring additional metadata which

describes the multimedia data supplied by the given one of the resources, and including the

additional metadata in the character-based text annotation in fig. 2, fig. 4-7, and col. 9 line 9 –

col. 14 line 55. Nelson teaches in col. 5 lines 39-51 that the multimedia component may be

referenced by tags in the multimedia document. If the reference indicates a resource located on

the Internet, Nelson is then going to obtain additional information about the resource via the

Internet in forming the characterization token.

Regarding independent claim 8, Nelson teaches a parser for identifying markup tags in

a Web page in fig. 1-2, fig. 4, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 9 line

7. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML

document and HTML documents generally represent Web pages, thus the scope of Nelson

includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-

38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson

teaches analyzing the content of multimedia data identified by markup tags to generate metadata

describing the multimedia data in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. The cited

text section described how Nelson generates metadata for each of the types of multimedia

content components.

Nelson teaches translating the metadata into a character-based text annotation describing

the multimedia data in fig. 6-8 and col. 3 lines 19-59. Nelson teaches formatting the metadata

into character-based tokens in fig. 6-8 and col. 3 lines 19-59. The tokens for the different

multimedia component types are normalized so that tokens can be combined into a single index

as is shown in fig. 8. Nelson teaches indexing the multimedia document into a unified

multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia

document in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the

document from which it was extracted through use of a unique document ID referencing that

document.

Nelson does not teach storing the combination of a copy of the Web page and the

annotation to form an enhanced Web page suitable for processing by text-based indexing and

searching facilities. As stated earlier, Nelson does teach that all of the tokens extracted from a

particular document are linked to that document through use of a unique document ID in col. 15

lines 24-36. Therefore, tokens of text, image, video, audio, and other data are all linked together

to represent a single document through use of the unique document ID. Thus, this is essentially

the same in function, but only similar in form to the claimed limitation. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to have modified

Nelson to have created the claimed invention. It would have been obvious and desirable to have

modified Nelson to have inserted the token representations of image, video, audio, and other multimedia components into the text of the multimedia document so that the text did not have to be processed, thus allowing the extraction software design to be simpler.

Regarding independent claim 10, Nelson teaches identifying one or more markup tags in a Web page which respectively identify one or more external resources which provide multimedia data in fig. 1-2, fig. 4, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 9 line 7. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML document and HTML documents generally represent Web pages, thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson teaches generating metadata which describes the multimedia data in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. The cited text section described how Nelson generates metadata for each of the types of multimedia content components.

Nelson teaches translating the metadata into a character-based text annotation describing the multimedia data in fig. 6-8 and col. 3 lines 19-59. Nelson teaches formatting the metadata into character-based tokens in fig. 6-8 and col. 3 lines 19-59. The tokens for the different multimedia component types are normalized so that tokens can be combined into a single index as is shown in fig. 8. Nelson teaches indexing the multimedia document into a unified multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia document in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the document from which it was extracted through use of a unique document ID referencing that document.

Nelson does not teach inserting the annotation into the Web page to form an enhanced

Web page suitable for processing by a character-based text processing system. As stated earlier,

Nelson does teach that all of the tokens extracted from a particular document are linked to that

document through use of a unique document ID in col. 15 lines 24-36. Therefore, tokens of text,

image, video, audio, and other data are all linked together to represent a single document through

use of the unique document ID. Thus, this is essentially the same in function, but only similar in

form to the claimed limitation. It would have been obvious to one of ordinary skill in the art at

the time the invention was made to have modified Nelson to have created the claimed invention.

It would have been obvious and desirable to have modified Nelson to have inserted the token

representations of image, video, audio, and other multimedia components into the text of the

multimedia document so that the text did not have to be processed, thus allowing the extraction

software design to be simpler.

Regarding dependent claim 11, Nelson teaches first identifying markup tags in a Web

page and extracting the uniform resource locator (URL) of one of the external resources from the

at least selected ones of the markup tags in fig. 1-2, fig. 4-7, col. 2 lines 19-37, col. 5 lines 11-51,

and col. 8 line 1 – col. 14 line 55. Nelson shows in the col. 5 lines 39-51 that the multimedia

document can be an HTML document and HTML documents generally represent Web pages,

thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically

indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the multimedia document may be a

downloaded Web page. Nelson teaches in col. 5 lines 39-51 that the multimedia component may

be referenced by tags in the multimedia document. The reference to a multimedia component in

an HTML Web page is a URL.

Regarding dependent claim 12, Nelson teaches retrieving multimedia data from one or

more external resources and analyzing the content of the multimedia data to extract the metadata

therefrom in fig. 1-2, fig. 4-7, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 14 line

55. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML

document and HTML documents generally represent Web pages, thus the scope of Nelson

includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-

38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson

teaches in col. 5 lines 39-51 that the multimedia component may be referenced by tags in the

multimedia document. The reference is to an external resource from which the multimedia data

is retrieved and the metadata extract therefrom.

Regarding dependent claim 13, Nelson teaches identifying the data type of the

multimedia data from each of the resources and then selecting a processing routine for

multimedia of the identified data type from each of the resources in fig. 2, fig. 4, and col. 3 lines

21-27.

Regarding dependent claim 14, Nelson teaches indexing the multimedia document into

a unified multimedia index to equally represent in a normalized fashion all of the tokens of the

multimedia document and provide access to the Web page in response to queries expressing one

or more attributes expressed in the text annotation in fig. 8-9 and col. 14 line 56 – col. 15 line 58.

Each of the tokens is linked to the document from which it was extracted through use of a unique

document ID referencing that document.

Regarding dependent claim 15, Nelson teaches searching the content of the Web page

in response to a search request to determine if attributes expressed in the search request are

contained in the text annotation in fig. 11-16, col. 3 line 47 – col. 4 line 17, and col. 15 line 60 –

col. 27 line 3.

Regarding dependent claim 16, Nelson teaches indexing the Web page to provide

access to the Web page in response to queries expressing one or more attributes expressed in the

text annotation in fig. 11-16, col. 3 line 47 – col. 4 line 17, and col. 15 line 60 – col. 27 line 3.

Regarding dependent claim 17, Nelson teaches searching the content of the Web page

in response to a search request to determine if attributes expressed in the search request are

contained in the text annotation in fig. 11-16, col. 3 line 47 – col. 4 line 17, and col. 15 line 60 –

col. 27 line 3.

Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nelson et al. (hereinafter "Nelson"), US 6,243,713 B1 filed 8/24/1998 in view of Mohan et al.

(hereinafter "Mohan"), US 6,748,382 B1 filed 12/1/1999 with priority to provisional filed

1/28/1999.

Regarding dependent claim 3, Nelson does not teach generating a text data annotation

expressed in accordance with the Extensible Markup Language. Mohan does teach generating a

text data annotation expressed in accordance with the Extensible Markup Language in fig. 3 and

col. 2 lines 16-28. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have combined Mohan into Nelson to have created the claimed invention.

It would have been obvious and desirable to have enhanced the tokens of Nelson with the XML

based media asset management descriptions of Mohan to have ensured maximum

interoperability as described by Mohan in col. 2 lines 27-28.

Regarding dependent claim 9, Nelson does not teach generating a text data annotation

expressed in accordance with the Extensible Markup Language. Mohan does teach generating a

text data annotation expressed in accordance with the Extensible Markup Language in fig. 3 and

col. 2 lines 16-28. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have combined Mohan into Nelson to have created the claimed invention.

It would have been obvious and desirable to have enhanced the tokens of Nelson with the XML

based media asset management descriptions of Mohan to have ensured maximum

interoperability as described by Mohan in col. 2 lines 27-28.

(10) Response to Argument

Regarding Appellant's arguments in pages 6-9 that Nelson does not teach or suggest all

of the limitations of independent claims 1, 8, and 10, the Examiner respectfully disagrees.

Nelson teaches in col. 1 line 32 – col. 2 line 11 that both text and image retrieval databases are

known, but generally operate independently of each other. Nelson teaches a motivating desire in

col. 2 lines 21-16 to provide a system, method, and software product that retrieves compound in

response to queries that include various multimedia elements in a structured form, including text,

image features, audio, or video. Nelson provides a solution to this need with its invention by

creating character-based annotations called tokens. All the tokens created from the various

dissimilar multimedia types are normalized into the same character-based format, thus allowing

unified indexing and searching of the documents and their various types of multimedia

components. The tokens are permanently associated or attached to the document from which

they were extracted via use of a document ID which is part of the token as is taught in col. 15

lines 24-36. Thus, the token annotates the document from which it was created.

Nelson describes that the documents and their components are indexed into a unified,

common index in col. 2 lines 19-27. Since the tokens are character-based annotations, the

unified index is created with a conventional text-based indexing system. Thus, the Examiner

believes this indexing system used by Nelson is the same as that of the claimed invention once

the system has obtained the character-based text annotations. The only prior difference is

whether the indexing system obtains the annotations via their association with the document as is

specifically taught in Nelson, or whether the indexing system pulls the annotations directly out of

the document as is done in the claimed invention. Nelson calls its indexing system a multimedia

index because of the logic of the character-based tokens representing multimedia objects. The

fact remains that the tokens themselves are character-based annotations of the document they are

associated with via their document ID. Thus, Examiner maintains that token annotations of

Nelson teach the character-based text annotation of the claimed invention. Nelson does not

specifically anticipate the claimed invention because Nelson maintains the token separate from

the document and permanently attaches it to the document via the document ID attribute of the

token. The Examiner believes, however, that the teachings in Nelson suggest to one of ordinary

skill in the art at the time of the invention a desirability to imbed the annotation, or token,

directly into the document.

Nelson teaches in col. 5 lines 39-51 that it is used for indexing multimedia compound

documents such as HTML documents, which are the standard document format for displaying

web page documents. The HTML standard itself teaches the meta element, which is a character-

based text annotation inserted into the document. Conventional search indexes can use these meta element character-based text annotations to classify the document. Therefore, Nelson has knowledge of the advantages of imbedding character-based text annotations directly into the document to simplify the indexing of the document. Therefore, the Examiner maintains the belief that Nelson suggests, via knowledge of HTML documents, to one of ordinary skill in the art at the time of the invention that it was advantageous to have imbedded character-based text annotations directly into the document itself. This would have motivated one of ordinary skill in the art at the time of the invention to have considered modifying Nelson by imbedding rather than linking the character-based tokens into the multimedia documents, thus containing the metadata annotations within the document as is taught by the meta element of HTML. By embedding all of the tokens into the document, all of the meta data would have been extractable form a single source, the parent document, thus simplifying the software extraction of the character-based text annotations for indexing the multimedia document. Such a modification to Nelson would not render it unsatisfactory for its intended purpose because the intended purpose of Nelson is to provide a unified index of the multimedia document and all of its multimedia components and this is performed by the creation and indexing of the character-based tokens describing the content of the multimedia document and each of its multimedia components. Nelson fulfills its purpose of providing a unified index regardless of whether the character-based tokens are associatively linked to the document, or imbedded within the document. The indexing of the tokens would be the same regardless of where they are stored and Nelson would successfully commonly index the multimedia documents and their multimedia components either

way. It is for these reasons that the Examiner maintains that Nelson teaches or suggests every

limitation of the invention as presented in claims 1, 8, and 10.

Regarding Appellant's arguments in page 10 that Nelson does not teach or suggest every

limitation of dependent claim 6, the Examiner respectfully disagrees. Nelson teaches in col. 11

lines 41-53, col. 12 line 66 – col. 13 line 7, and col. 13 lines 62-67 that the format is determined

for each media component and is then converted into a standard format and size. Therefore,

Nelson teaches that the operating system is used by the indexing system to properly identify the

multimedia components during the creation of the tokens corresponding to those multimedia

components. Nelson explains that the format and size of the multimedia components are

standardized, thus the operating system information is not specifically used as metadata.

However, since Nelson teaches that the operating system information is used to produce the

metadata, the Examiner believes Nelson recognizes the benefit of collecting information from

the operating system. Nelson therefore suggests that the this metadata would be useful as actual

information in character-based tokens if the multimedia data was not otherwise standardized.

Thus, the Examiner maintains that Nelson suggests to one of ordinary skill in the art at the time

of the invention the limitation of dependent claim 6.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

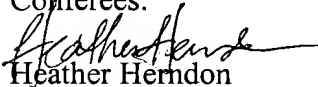Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.
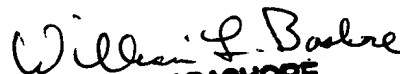
Respectfully submitted,

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12/5/2005